

increased over time: 11.6% vs 14.9% vs 21.6% ($P = .01$). The risk-adjusted LOS index at our institution was significantly greater (1.25) compared with UHC hospitals (0.75) except the first quarter of FY14, where an EVAR quality initiative project was introduced, resulting in equalization of the LOS index (0.70). The greater increase in expected LOS at our institution (26%) compared with UHC hospitals (7%) partially accounted for the increased LOS index.

Conclusions: Our study suggests a relationship between time of EVAR, SOI, complications, and LOS. Attention to these trends can be used to decrease LOS in an increasingly complex patient population.

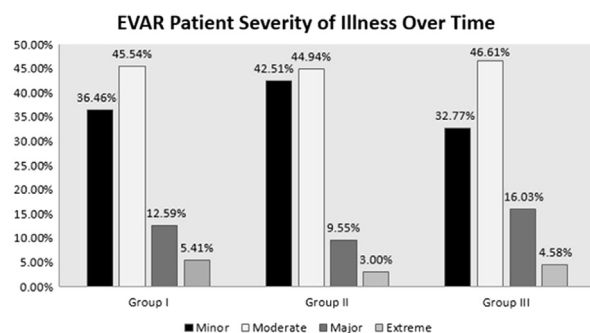


Fig.

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PS142.

Isolated Iliac Artery Aneurysms: The Impact of Endovascular Repair

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Objectives: Isolated Iliac artery aneurysms (iIAA) are rare, but potentially fatal. The impact of recent trends in the use of advances in imaging and endovascular therapies (EVIR) on iIAA-associated mortality is unknown.

Methods: We identified all patients with a primary diagnosis of IAA in the National Inpatient Sample from 1988 to 2011. We examined trends in management (open vs EVIR) and overall iIAA related deaths (with or without repair). We compared in-hospital mortality and complications for elective open and EVIR from 2000 to 2011.

Results: We identified 17,102 patients undergoing iIAA repair from 1988 to 2011; 9016 EVIR and 4933 open repairs electively from 2000 to 2011. Endovascular surpassed open repair in 2003. Total repairs increased after introduction of EVIR ($P \leq .001$). Total deaths, including nonoperative, decreased after the introduction of EVIR (0.54 to 0.24 per 1 million U.S. population, $P \leq .001$). For elective repairs after 2000, EVIR patients were older (72.4 vs 69.4 years, $P = .002$) with more prior myocardial

infarction (14.0% vs 11.3%; $P < .001$) and chronic renal failure (7.2% vs 3.6%, $P < .001$). Open repair had significantly higher in-hospital mortality (1.8% vs 0.5%, $P < .001$), more complications (17.9% vs 6.7%, $P < .001$) and a longer length of stay (6.7 vs 2.3 days, $P < .001$).

Conclusions: Treatment of iIAA has increased with the introduction of EVIR, with lower perioperative mortality, despite a higher burden of comorbid illness. Decreasing iIAA-attributable deaths are likely related to lower elective mortality and rupture prevention.

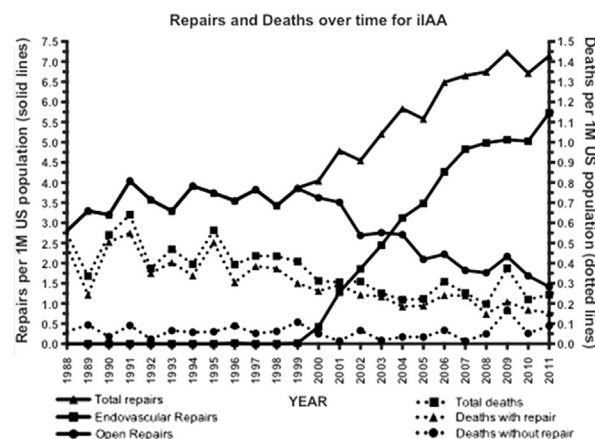


Fig.

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PS144.

A Comparison of Estimated Outcomes Using the ACS NSQIP Universal Risk Calculator Tool to Observed Vascular Procedure Outcomes in a Community Teaching Hospital

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Objectives: The National Surgical Quality Improvement Program (NSQIP) universal risk calculator tool was designed using 1.4 million cases and >2800 different Current Procedural Terminology (CPT) codes to estimate perioperative risk across multiple surgical subspecialties to guide informed consent. We aimed to test whether perioperative risk was accurately estimated for a vascular surgery cohort in a community teaching hospital setting.

Methods: We performed an IRB-approved retrospective record review of all consecutive vascular surgery cases between July 1, 2012, and June 30, 2013. We excluded CPT codes that were not available in the risk calculator and reoperations ≤ 30 days of the index procedure. We reviewed all 23 preoperative risk factors present in the NSQIP tool for each procedure. An estimated